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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS NEWS	1 2			Web Page URLs for STN Seminar Schedule - N. America "Ask CAS" for self-help around the clock
NEWS	3	Feb	24	PCTGEN now available on STN
NEWS	4	Feb	24	TEMA now available on STN
NEWS	5	Feb	26	NTIS now allows simultaneous left and right truncation
NEWS	6	Feb	26	PCTFULL now contains images
NEWS	7	Mar	04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	8	Mar	24	PATDPAFULL now available on STN
NEWS	9	Mar	24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	10	Apr	11	Display formats in DGENE enhanced
NEWS		Apr		MEDLINE Reload
NEWS		Apr		Polymer searching in REGISTRY enhanced
NEWS		AUG		Indexing from 1937 to 1946 added to records in CA/CAPLUS
NEWS		Apr		New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS	15	Apr	2.8	RDISCLOSURE now available on STN
NEWS		May		Pharmacokinetic information and systematic chemical names added to PHAR
NEWS	17	May	1 5	MEDLINE file segment of TOXCENTER reloaded
NEWS		-	15 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS		May		Simultaneous left and right truncation added to WSCA
NEWS		May		RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS	21	Tun	06	Simultaneous left and right truncation added to CBNB
NEWS		Jun		PASCAL enhanced with additional data
NEWS		Jun		2003 edition of the FSTA Thesaurus is now available
NEWS		Jun		HSDB has been reloaded
NEWS		Jul		Data from 1960-1976 added to RDISCLOSURE
NEWS		Jul		Identification of STN records implemented
NEWS		Jul		Polymer class term count added to REGISTRY
NEWS		Jul		INPADOC: Basic index (/BI) enhanced; Simultaneous Left and
				Right Truncation available
NEWS	29	AUG	05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	30	AUG	13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	31	AUG	15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS	32	AUG	15	<del>-</del>
NEWS	33	AUG	15	<u>-</u>
NEWS	34	AUG	15	TEMA: one FREE connect hour, per account, in September 2003

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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FILE 'HOME' ENTERED AT 13:37:04 ON 16 AUG 2003

=> file medline, uspatful, dgene, embase, wpids, biosis, hcaplus TOTAL COST IN U.S. DOLLARS SINCE FILE

ENTRY SESSION

FULL ESTIMATED COST

1.47 1.47

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=> s apophotoprotein

9 APOPHOTOPROTEIN

=> d l1 ti abs ibib tot

ANSWER 1 OF 9 USPATFULL on STN

Peridinin-chlorophyll complex as fluorescent label TT

Peridinin-chlorophyll-protein complexes are provided for use as AB fluorescent labels and are particularly useful in diagnostic assays employing as a reagent a fluorescent compound conjugated to a member of a specific binding pair, wherein the pair consists of a biochemical ligand and a receptor and the diagnostic assay comprises a step in which the conjugate binds to its complementary binding-pair member.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

89:87477 USPATFULL

TITLE:

Peridinin-chlorophyll complex as fluorescent label Recktenwald, Diether J., Cupertino, CA, United States

INVENTOR(S):

PATENT ASSIGNEE(S): Becton Dickinson & Company, Franklin Lakes, NJ, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4876190 19891024

APPLICATION INFO.: US 1987-111209 19871021 (7)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Hill, Jr., Robert J.

PRIMARY EXAMINER: Hill, Jr., Robert J
LEGAL REPRESENTATIVE: Neeley, Richard L.
NUMBER OF CLAIMS: 10

NUMBER OF CLAIMS: 1 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 586

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 2 OF 9 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

TI Novel recombinant nucleic acid molecules that encode the apophoprotein of pholasin or its homologous sequence useful for detecting location and measurement of oxygen and its metabolites in living cells and organs.

AN 2000-387420 [33] WPIDS

AB WO 200028025 A UPAB: 20000712

NOVELTY - An isolated, purified or recombinant nucleic acid sequence (I) comprising a sequence encoding a apophoprotein of pholasin (apopholasin) (II), a sequence (Ia) substantially homologous to or that hybridizes to (I), a sequence (Ib) which is homologous or that hybridizes to (I) or (Ia) or a oligonucleotide specific for (I), (Ia) or (Ib), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated, purified or recombinant construct (III) incorporating a sequence encoding (II);
  - (2) a DNA or RNA which encodes (II);
- (3) an isolated, purified or recombinant polypeptide (IV) comprising (II) or its mutant or variant having substantially the same activity of (II):
- (4) a cell, plasmid, virus or a living organism that has been genetically engineered to produce an apoprotein having a sequence of (I), (Ia), (Ib) or (III) incorporated into it;
  - (5) vector (V) comprising the above mentioned nucleic acid sequences;
  - (6) a host cell (VI) transformed with (V);
- (7) a BOIP (bioluminescent oxidative indicator protein) comprising (II) in association with a luciferin (preferably one derived from Pholas dactylus);
- (8) preparation of BOIP, comprising bringing an apophotoprotein, such as recombinant apopholasin, into association with a luciferin, such as one derived from Pholas dactylus;
- (9) a BOIP, its apophoprotein or a nucleic acid sequence encoding either of these which comprises one of the seven sequences of defined amino acids as given in the specification that has been chemically or genetically modified;
- (10) a diagnostic kit incorporating (I)-(V) or any of the above mentioned proteins; and
- (11) obtaining a substantially homologous source of (II) which involves culturing cells having incorporated expressibly, a polynucleotide encoding (II) and then recovering the cultured cells;
- USE BOIP, which is native, chemically or genetically modified or as a rainbow protein based on BOIP comprising (II), is used for the detection, diagnosis or measurement of oxygen or its metabolites intracellularly or extracellularly. This involves providing the above mentioned protein intracellularly or extracellularly and then detecting and/or quantifying light emission from them, and/or changes in color intensity and/or polarization of emissions, in which the test sample is incubated with a host cell (VI) or a membrane preparation derived from it.

The BOIP includes a signal peptide whose target is set to a predetermined extra or intracellular site. The light emission preferably takes place in the absence of the luciferase (claimed). (II) in a peptide or pholasin is useful as a protein or a DNA label or in genetic entertainment which involves adding pholasin to drink such as beer, cola, soft drinks and spirits to make them glow since pholasin is able to chemiluminesce at a wide range of pH (3-10). It can also be added to foodstuffs such as cakes, icing or popcorn, and in a wide range of toys and other entertaining devices such as squirt guns, greeting cards or pens. BOIP, apo-BOIP or nucleic acid coding for it are used in a range of investigations such as detection, location and measurement of signals in substrates, such as live cells, organs or organisms, or in extracellular fluids, detection and location of cells such as microbes (protozoa, yeast, fungi, molds, bacteria, viruses), detection and location of abnormal cells such as cancer cells, hyperactive cells in rheumatoid arthritis and other inflammatory diseases, cells infected with a pathogen, such as virus or other infectious agents, cells damaged by physical, chemical or biological attack, cells damaged by perfusion or reperfusion injury or cells damaged by oxygen or one of its metabolites, measurement and location of enzymes, particularly those that catalyse the production of oxygen or its metabolites, and other tumor reactions in cells of biological fluids, DNA and RNA binding assays, immunoassay and other protein binding assays and in genetic engineering in the development of transgenic animals and plants, and microbes, in horticulture, agriculture, medicine and veterinary medicine.

ADVANTAGE - Change in light emission of (II) enables the oxygen or its metabolites to be detected and quantified in live cells, organelles or on the outer or inner surface of the plasma membrane, or within an organ of a live organism without the need to break them open or the need to separate bound and free fractions. This also enables an enzyme producing oxygen or one of its metabolites to be detected and quantified in live cells, organs and whole organisms or their extracts.

Dwg.0/10

ACCESSION NUMBER: 2000-387420 [33] WPIDS

DOC. NO. NON-CPI: N2000-290048
DOC. NO. CPI: C2000-117553

TITLE: Novel recombinant nucleic acid molecules that encode the apophoprotein of pholasin or its homologous sequence

apophoprotein of pholasin or its homologous sequence useful for detecting location and measurement of oxygen

and its metabolites in living cells and organs.

DERWENT CLASS: B04 D16 S03 INVENTOR(S): CAMPBELL, A K

PATENT ASSIGNEE(S): (UYWA-N) UNIV WALES COLLEGE OF MEDICINE

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000028025 A1 20000518 (200033)\* EN 50

RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

W: AU CA JP US

AU 2000011687 A 20000529 (200041) EP 1124957 A1 20010822 (200149)

1124957 A1 20010822 (200149) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI

JP 2002529085 W 20020910 (200274) 56

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000028	025 A1	WO 1999-GB3654	19991105
AU 2000011	687 A	AU 2000-11687	19991105
EP 1124957	<b>A</b> 1	EP 1999-971851	19991105

 JP 2002529085 W
 WO 1999-GB3654
 19991105

 JP 2000-581192
 19991105

FILING DETAILS:

PATENT NO KIND PATENT NO

AU 2000011687 A Based on WO 200028025

EP 1124957 A1 Based on WO 200028025

JP 2002529085 W Based on WO 200028025

PRIORITY APPLN. INFO: GB 1998-24357 19981107

L1 ANSWER 3 OF 9 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN AN 1991-031348 [00] WPIDS

ABEQ EP 437013 A UPAB: 19930928

Detection of an analyte in a sample is effected by process in which the analyte interacts with a specific-binding cpd. to form a complex in a reaction medium, and formation of the complex is detected by measuring light emitted by a luminescent label on a component of the specific-binding system that forms the complex.

The process is characterised in that (a) the label is a photoprotein, i.e. a conjugate of a protein and a luminescent mol. that emits light only in the presence of an external trigger; (b) the reaction medium is contacted with the corresp. apophotoprotein (i.e. the protein without the luminescent mol.) before introducing the photoprotein label into the reaction medium; and (c) the trigger is added to the reaction medium after formation of the complex.

USE/ADVANTAGE - The process may be used for determn. of Forrsman glycolipid (FGL). Addn. of the **apophotoprotein** reduces background light emission, thereby increasing sensitivity, e.g. reducing the FGL detection limit from 1000 to 62.5 pg. (First major country equivalent to FI9001681-A) 0/1

ACCESSION NUMBER:

1991-031348 [00] WPIDS

DOC. NO. NON-CPI:

N1991-159181

DOC. NO. CPI:

C1991-090411

- L1 ANSWER 4 OF 9 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
  TI Increasing sensitivity of luminescent assays by using photo-protein label bound to luminescent mol. contacting the reaction medium with apo-photo-protein and adding trigger to the react.
- AN 1990-354909 [48] WPIDS
- AB AU 9053123 A UPAB: 19930928

An improvement in a method for detecting the presence of an analyte in a sample by the interaction of the analyte with a specific binding cpd. to form a complex in a reaction medium and in which formation of the complex is detected by measurement of light emitted by a luminescent molecule used as a label on a component of the specific binding system that forms the complex comprises: (a) using as the label a photoprotein bound to a luminescent molecule. The luminescent molecule remains bound to the photoprotein without emitting light in the absence of an external trigger; (b) contacting the reaction medium with an apophotoprotein of the photoprotein, (thee apophotoprotein comprises the photoprotein in the absence of the luminescent molecule), prior to introduction of the photoprotein label to the reaction medium; and (c) adding the trigger to the reaction medium after formation of the complex.

USE/ADVANTAGE - The method increases the sensitivity of bioluminescence assays. Background luminescence is reduced in all types of bioluminescence assays.

0/0

ABEQ FI 9001681 A UPAB: 19930928

A body of waste liq., e.g. sewage or the contents of a fish tank, held in

a reservoir (1) is aerated after being drawn from the central area of the reservoir into the bases of the series of upright cylindrical containers (2) whose closed ends rest on the reservoir floor.

Individual strop water radially directed pipes (5) enter the containers below the level of the aerators (8). Aerators may be nozzles directing a stream of compressed air, or rotors driven by submerged motors and expelling air drawn in by pipes (37) extending above the water surface.

Below that surface, each container has at its head an overflow (5), pref. with a parallel cap to prevent frothing and fromm which water raisedt by the bubbled air starts a slow circulation back to the lower reservoir depths. Any foam at the water surface is broken down by bladed rotors (10).

ADVANTAGE - Reservoir contents are intensively and uniformly aerated without aeration requiring movement. @ 0/6

### ABEQ EP 437013 A UPAB: 19931129

An improvement in a method for detecting the presence of an analyte in a sample by the interaction of the analyte with a specific binding cpd. to form a complex in a reaction medium and in which formation of the complex is detected by measurement of light emitted by a luminescent molecule used as a label on a component of the specific binding system that forms the complex comprises: (a) using as the label a photoprotein bound to a luminescent molecule. The luminescent molecule remains bound to the photoprotein without emitting light in the absence of an external trigger; (b) contacting the reaction medium with an apophotoprotein of the photoprotein, (thee apophotoprotein comprises the photoprotein in the absence of the luminescent molecule), prior to introduction of the photoprotein label to the reaction medium; and (c) adding the trigger to the reaction medium after formation of the complex.

USE/ADVANTAGE - The method increases the sensitivity of bioluminescence assays. Background luminescence is reduced in all types of bioluminescence assays. @(17pp Dwg.No.0/0

ACCESSION NUMBER:

1990-354909 [48] WPIDS

DOC. NO. NON-CPI:

N1990-271106

DOC. NO. CPI:

C1991-013385

TITLE:

Increasing sensitivity of luminescent assays - by using photo-protein label bound to luminescent mol. contacting the reaction medium with apo-photo-protein and adding

trigger to the react.

DERWENT CLASS:

B04 J04 S03

INVENTOR(S):
PATENT ASSIGNEE(S):

MCCANN, R O; SMITH, D F (ELAT-N) ELA TECHN INC

COUNTRY COUNT:

19

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
AU 9053123	A	19901011	(199048)*	•	
NO 9001613	A	19901011	(199050)		
FI 9001681	A	19901011	(199105)		
JP 03067156	Α	19910322	(199118)		
CN 1046605	Α	19901031	(199128)		
EP 437013	A	19910717	(199129)		
R: AT BE	CH I	DE ES FR	GB GR IT L	ıI LU	NL SE
ZA 9002711	Α	19911224	(199205)		
EP 437013	EA	19921014	(199340)		

# APPLICATION DETAILS:

PATE	NT NO	KIND	APPLICATION	DATE
AU 9	053123	Α	AU 1990-531	23 19900410
FI 9	001681	A	FI 1990-168	1 19900403

JΡ	03067156	A	JP	1990-93254	19900410
CN	1046605	A	JP	1990-93254	19900410
EP	437013	A	EP	1990-303864	19900410
za	9002711	A	ZA	1990-2711	19900409
EP	437013	A3	EP	1990-303864	19900410

PRIORITY APPLN. INFO: US 1989-335826 19890410

- L1 ANSWER 5 OF 9 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
- TI Conjugates of peridinin-chlorophyll-protein complexes with member of specific binding pair for use in e.g. diagnostic assays.
- AN 1989-131930 [18] WPIDS
- AB EP 314406 A UPAB: 19930923

A fluorescent cpd. comprising a peridinin-chlorophyll -protein complex (PCPC) conjugated to a member of a specific binding pair (sbp) of biochemical molecules that bind specifically to each other is claimed.

The conjugates may be prepd. by forming a covalent bond between the sbp member and the **apophotoprotein** of the PCPC. Alternatively non-covalent bonds may be used e.g. biotin may be covalently conjugated to the PCPC protein through a carboxyl gp. and the resulting complex combined with avidin to produce a protein-labelled avidin.

USE/ADVANTAGE - The conjugates may be used for the detection, diagnosis, measurement and study of antigens and receptors, e.g. for fluorescent staining of cells or diagnostic assays such as immunoassays. The conjugates have high absorption coeffts. in the longer-wavelength visible spectral regions, high fluorescence quantum yields, long term stability, high water solubility, low non-specific binding and large Stokes shift.

0/11

ABEQ US 4876190 A UPAB: 19930923

Diagnostic assay uses a reagent comprising a fluorescent cpd. (I) conjugated to a member of a specific binding pair. In the assay the conjugated member binds to the other member of the specific binding pair (I) is a peridinin-chlorophyll-protein complex. The other member of the pair may be a cell or cell surface antigen.

ADVANTAGE - The conjugated complex has sufficient stability and sensitivity.

ABEQ EP 314406 B UPAB: 19931119

A diagnostic assay employing as a reagent a fluorescent compound conjugated to a member of a specific binding pair, wherein said pair comprises two biochemical molecules that bind specifically to each other and said diagnostic assay comprises a step in which the conjugate binds to its complementary binding-pair member, characterised in that said reagent comprises a peridinin-chlorophyll-protein complex conjugated to a member of said specific binding pair.

Dwg.1/11

ACCESSION NUMBER: 1989-131930 [18] WPIDS

DOC. NO. NON-CPI: N1989-100479 DOC. NO. CPI: C1989-058367

TITLE: Conjugates of peridinin-chlorophyll-protein complexes - with member of specific binding pair for use in e.g.

diagnostic assays.

DERWENT CLASS: B04 J04 S03

INVENTOR(S): RECKTENWAL, D J; RECKTENWALD, D J

PATENT ASSIGNEE(S): (BECT) BECTON DICKINSON CO

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

EP 314406 A 19890503 (198918)\* EN 14

R: AT BE CH DE ES FR GB GR IT LI NL SE

JP 01147368 A 19890609 (198929)

US 4876190 A 19891024 (199001) 10 EP 314406 B1 19930825 (199334) EN 13

R: AT BE CH DE ES FR GB GR IT LI NL SE

DE 3883478 G 19930930 (199340) JP 06014043 B2 19940223 (199411) ES 2059533 T3 19941116 (199501)

## APPLICATION DETAILS:

PATENT NO	KIND		AP	PLICATION	DATE
EP 314406	A			1988-309940	19881021
JP 01147368 US 4876190	A A			1988-265937 1987-111209	19881021 19871021
EP 314406	B1	,	EP	1988-309940	19881021
DE 3883478	G			1988-3883478	19881021
				1988-309940	19881021
JP 06014043	B2			1988-265937	19881021
ES 2059533	T3		EP	1988-309940	19881021

#### FILING DETAILS:

PAT	TENT NO	KIND			PAT	TENT NO
DE	3883478	G	Based	on	ΕP	314406
JP	06014043	B2	Based	on	JP	01147368
ES	2059533	Т3	Based	on	EP	314406

PRIORITY APPLN. INFO: US 1987-111209 19871021

L1 ANSWER 6 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN Sequence of the cDNA encoding the Ca-2+-activated photoprotein obelin from the hydroid polyp Obelia longissima.

AB A cDNA clone encoding the Ca-2+-activated photoprotein, obelin (Ob1), from Obelia longissima was sequenced. The nucleotide (nt) sequence contained two long overlapping open reading frames (ORFs), one of which encoded apoobelin (apoObl). The deduced amino acid (aa) sequence of apoObl revealed that this 195-aa protein has three EF-hand structures that are characteristic for Ca-2+-binding domains. Strong aa homology was shown among apoObl, apoaequorin and apoclytin. The second ORF present in the obl cDNA consists of 139 codons and encodes a very basic protein with a calculated pI of 10.56 and a molecular mass of 16 153 Da.

ACCESSION NUMBER: 1995:171678 BIOSIS DOCUMENT NUMBER: PREV199598185978

TITLE: Sequence of the cDNA encoding the Ca-2+-activated photoprotein obelin from the hydroid polyp Obelia

longissima.

AUTHOR(S): Illarionow, Boris A. (1); Bondar, Vladimir S.; Illarionova,

Victoria A.; Vysotski, Eugene S.

CORPORATE SOURCE: (1) Lab. Photobiol., Inst. Biophysics, Siberian Branch

Russian Academy Sci., Krasnojarsk 660036 Russia

SOURCE: Gene (Amsterdam), (1995) Vol. 153, No. 2, pp. 273-274.

ISSN: 0378-1119.

DOCUMENT TYPE: Article LANGUAGE: English

L1 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

TI Efficiency of apophotoprotein charging depends strongly on protein concentration

AB In using photoproteins such as obelin as reporter proteins, one must take into account that the recombinant photoproteins are synthesized as apoproteins, and that to generate an active photoprotein the apo-obelin must be charged with synthetic coelenterazine (I) under appropriate environmental conditions. Here, the kinetics of apo-obelin charging with

I were investigated at 4, 22, and 37.degree.. At 4.degree., the charging progressed slowly, the concn. of active photoprotein reaching a max. after 4-6 h of incubation, and then remaining const. for at least 24 h. At 22 and 37.degree., the charging was significantly faster, the amt. of active obelin reaching a max. after .apprx.1 h, and then declining slowly. The effect of protein (apo-obelin) concn. on the efficiency of charging was studied at all 3 temps. In each case, an apoprotein: I molar ratio of 1:1 The efficiency of the charging reaction varied significantly with the protein concn. The fraction of apo-obelin mols. remaining uncharged at the end of the reaction time decreased with increasing total protein concn. A math. model describing the process of I binding was proposed.

ACCESSION NUMBER:

2001:843394 HCAPLUS

DOCUMENT NUMBER:

136:228494

TITLE:

Efficiency of apophotoprotein charging depends strongly on protein concentration Vysotski, E. S.; Frank, L. A.; Bondar, V. S. Photobiology Lab, Russian Academy of Sciences,

AUTHOR(S):

CORPORATE SOURCE: Krasnoyarsk, 660036, Russia

SOURCE:

Bioluminescence & Chemiluminescence, Proceedings of the International Symposium, 11th, Pacific Grove, CA, United States, Sept. 6-10, 2000 (2001), Meeting Date 2000, 139-142. Editor(s): Case, James F. World Scientific Publishing Co. Pte. Ltd.: Singapore,

Singapore. CODEN: 69CAFI

DOCUMENT TYPE:

Conference

LANGUAGE:

English

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN L1
- Recombinant obelin: cloning and expression of cDNA, purification, and TIcharacterization as a calcium indicator
- A review, with 59 refs., including the cloning of apophotoprotein obelin cDNA from Obelia longissima for expression in Escherichia coli, its AΒ purifn., and charging the product with the chromophore coelenterazine. Obelin and aequorin properties and their uses as calcium indicators are compared. Use of protein bioluminescence for expression screening in cloning of cDNAs may be advantageous in purifn. of other bioluminescent system photoproteins. (c) 2000 Academic Press.

ACCESSION NUMBER:

2000:510869 HCAPLUS

DOCUMENT NUMBER:

134:232304

TITLE:

Recombinant obelin: cloning and expression of cDNA,

purification, and characterization as a calcium

indicator

AUTHOR(S):

Illarionov, Boris A.; Frank, Ludmila A.; Illarionova, Victoria A.; Bondar, Vladimir S.; Vysotski, Eugene S.;

Blinks, John R.

CORPORATE SOURCE:

Photobiology Laboratory, Institute of Biophysics, Russian Academy of Sciences, Krasnoyarsk, 660036,

Russia

SOURCE:

Methods in Enzymology (2000), 305 (Bioluminescence and Chemiluminescence, Pt. C), 223-249

CODEN: MENZAU; ISSN: 0076-6879

PUBLISHER:

Academic Press

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN L1

Bioluminescence of Renilla reniformis. XVI. Extraction of Renilla-type TTluciferin from the calcium-activated photoproteins aequorin, mnemiopsin,

and berovin

A Repilla-type luciferin was extd. in high yield from 3 photoproteins, AΒ aequorin (45% yield), mnemiopsin (98% yield), and berovin (85% yield). Photoprotein luciferin, released from the holoprotein by mercaptoethanol treatment and sepd. from apophotoprotein by gel filtration, no longer responded to Ca but now required luciferase and O for light prodn. Photoprotein luciferin was identical to Renilla luciferin with respect to reaction kinetics and bioluminescence spectral distribution. Thus, the generally accepted hypothesis that the photoprotein chromophore is a protein-stabilized hydroperoxide of luciferin must be modified. Possibly, the chromophore is free luciferin and O is bound as an oxygenated deriv. of an amino acid side chain of the protein. The general term coelenterate luciferin is used to describe the light-producing chromophore from all bioluminescent coelenterates and ctenophores.

ACCESSION NUMBER:

1975:543297 HCAPLUS

DOCUMENT NUMBER:

83:143297

TITLE:

Bioluminescence of Renilla reniformis. XVI. Extraction of Renilla-type luciferin from the

calcium-activated photoproteins aequorin, mnemiopsin,

and berovin

AUTHOR(S):

Ward, William W.; Cormier, Milton J.

CORPORATE SOURCE:

Dep. Biochem., Univ. Georgia, Athens, GA, USA

SOURCE:

Proceedings of the National Academy of Sciences of the

United States of America (1975), 72(7), 2530-4

CODEN: PNASA6; ISSN: 0027-8424

DOCUMENT TYPE:

Journal

LANGUAGE:

English

=> s pholasin or apopholasin

129 PHOLASIN OR APOPHOLASIN

=> s 12 and encoding DNA

15 L2 AND ENCODING DNA L3

=> d 13 ti abs ibib tot

L3ANSWER 1 OF 15 USPATFULL on STN

Apparatus and method for detecting and identifying infectious agents TI Solid phase methods for the identification of an analyte in a biological AΒ medium, such as a body fluid, using bioluminescence are provided. A chip designed for performing the method and detecting the bioluminescence is also provided. Methods employing biomineralization for depositing silicon on a matrix support are also provided. A synthetic synapse is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:165886 USPATFULL

TITLE:

Apparatus and method for detecting and identifying

infectious agents

INVENTOR (S):

Bryan, Bruce J., Beverly Hills, CA, UNITED STATES Gaalema, Stephen, Colorado Springs, CO, UNITED STATES Murphy, Randall B., Irvington, NY, UNITED STATES

NUMBER KIND DATE PATENT INFORMATION:

APPLICATION INFO.:

US 2003113741 A1 20030619 US 2002-126777 A1 20020419 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-990103, filed on 12 Dec 1997, GRANTED, Pat. No. US 6458547

> NUMBER DATE

\_\_\_\_\_\_

PRIORITY INFORMATION:

US 1997-37675P 19970211 (60)

US 1996-33745P 19961212 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility

APPLICATION

LEGAL REPRESENTATIVE:

Alan G. Towner, Pietragallo, Bosick & Gordon, One

Oxford Centre, 38th Floor, 301 Grant Street,

Pittsburgh, PA, 15219

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

80

NUMBER OF DRAWINGS:

19 Drawing Page(s)

LINE COUNT:

4828

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 2 OF 15 USPATFULL on STN L3

TI Renilla reniformis fluorescent proteins, nucleic acids encoding the fluorescent proteins and the use thereof in diagnostics, high throughput

screening and novelty items

Isolated and purified nucleic acids encoding green fluorescent proteins AΒ from Renilla reniformis and the green fluorescent protein encoded thereby are also provided. Mutants of the nucleic acid molecules and the modified encoded proteins are also provided. Compositions and combinations comprising the green fluorescent proteins and/or the luciferase are further provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:134013 USPATFULL

TITLE:

Renilla reniformis fluorescent proteins, nucleic acids encoding the fluorescent proteins and the use thereof in diagnostics, high throughput screening and novelty items

INVENTOR(S):

Bryan, Bruce, Beverly Hills, CA, UNITED STATES Szent-Gyorgyi, Christopher, Pittsburgh, PA, UNITED

Szczepaniak, William, Pittsburgh, PA, UNITED STATES

	NUMBER	KIND	DATE	
US	2003092098	A1	20030515	
US	2001-808898	A1	20010315	(9)

PATENT INFORMATION: APPLICATION INFO.:

> NUMBER DATE

PRIORITY INFORMATION:

US 2000-189691P 20000315 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

PIETRAGALLO, BOSICK & GORDON, ONE OXFORD CENTRE, 38TH

FLOOR, 301 GRANT STREET, PITTSBURGH, PA, 15219-6404

NUMBER OF CLAIMS:

77

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

6 Drawing Page(s)

LINE COUNT:

6322

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- $L_3$ ANSWER 3 OF 15 USPATFULL on STN
- Bioluminescent novelty items TT
- ABNovelty items that are combinations of articles of manufacture with fluorescent proteins are provided. These novelty items, which are articles of manufacture, are designed for entertainment, recreation and amusement, and include toys, paints, slimy play material, textiles, particularly clothing, bubbles in bubble making toys and other toys that produce bubbles, balloons, personal items, such as cosmetics, bath powders, body lotions, gels, powders and creams, toothpastes and other dentifrices, soaps, body paints, and bubble bath, foods, such as gelatins, icings and frostings, beverages such as beer, wine, champagne, soft drinks, and glowing ice, fountains, including liquid "fireworks"

and other such jets or sprays or aerosols of compositions that are solutions, mixtures, suspensions, powders, pastes, particles or other suitable formulation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:94732 USPATFULL

TITLE:

Bioluminescent novelty items

INVENTOR(S):

Bryan, Bruce, Beverly Hills, CA, UNITED STATES

DATE NUMBER KIND 

PATENT INFORMATION: APPLICATION INFO.:

US 2003066096 A1 20030403 US 2000-729133 A1 20001201 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1999-444762, filed on 22

Nov 1999, PENDING Continuation of Ser. No. US

1998-135988, filed on 17 Aug 1998, PATENTED Continuation-in-part of Ser. No. US 1996-757046, filed on 25 Nov 1996, PATENTED Continuation-in-part of Ser. No. US 1996-597274, filed on 6 Feb 1996, PATENTED

NUMBER DATE \_\_\_\_\_\_

PRIORITY INFORMATION:

US 1998-79624P 19980327 (60)

19980615 (60)

US 1998-89367P DOCUMENT TYPE:

FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

ALAN G. TOWNER, PIETRAGALLO, BOSICK & GORDON, ONE

OXFORD CENTRE, 38th FLOOR, PITTSBURGH, PA, 15219

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: LINE COUNT:

9 Drawing Page(s) 6495

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 4 OF 15 USPATFULL on STN L3

Apparatus and method for detecting and identifying infectious agents ΤТ

Solid phase methods for the identification of an analyte in a biological ABmedium, such as a body fluid, using bioluminescence are provided. A chip designed for performing the method and detecting the bioluminescence is also provided. Methods employing biomineralization for depositing silicon on a matrix support are also provided. A synthetic synapse is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:86193 USPATFULL

TITLE:

Apparatus and method for detecting and identifying

infectious agents

INVENTOR(S):

Bryan, Bruce J., Beverly Hills, CA, UNITED STATES Gaalema, Stephen, Colorado Springs, CO, UNITED STATES

Murphy, Randall B., Irvington, NY, UNITED STATES

NUMBER KIND DATE \_\_\_\_\_\_ US 2003059798 A1 20030327 US 2002-126798 A1 20020419 (10) PATENT INFORMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.:

Division of Ser. No. US 1997-990103, filed on 12 Dec

1997, GRANTED, Pat. No. US 6458547

NUMBER DATE

PRIORITY INFORMATION:

US 1997-37675P US 1996-33745P 19970211 (60) 19961212 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: Alan G. Towner, Pietragallo, Bosick & Gordon, One

Oxford Centre, 38th Floor, 301 Grant Street,

Pittsburgh, PA, 15219

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 80

NUMBER OF DRAWINGS:

19 Drawing Page(s)

LINE COUNT:

4829

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 5 OF 15 USPATFULL on STN

Apparatus and method for detecting and identifying infectious agents
Solid phase methods for the identification of an analyte in a biological
medium, such as a body fluid, using bioluminescence are provided. A chip
designed for performing the method and detecting the bioluminescence is
also provided. Methods employing biomineralization for depositing
silicon on a matrix support are also provided. A synthetic synapse is
also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:17351 USPATFULL

TITLE:

Apparatus and method for detecting and identifying

infectious agents

INVENTOR(S):

Bryan, Bruce J., Beverly Hills, CA, UNITED STATES Gaalema, Stephen, Colorado Springs, CO, UNITED STATES

Murphy, Randall B., Irvington, NY, UNITED STATES

NUMBER	KIND	DATE
US 2003013103	A1	20030116

PATENT INFORMATION:

US 2003013103 A1 20030116

APPLICATION INFO.: RELATED APPLN. INFO.:

US 2002-126139 A1 20020419 (10) Division of Ser. No. US 1997-990103, filed on 12 Dec

1997, GRANTED, Pat. No. US 6458547

NUMBER	DATE		
S 1997-37675P	19970211	(60)	

PRIORITY INFORMATION:

US 1997-37675P 19970211 (60) US 1996-33745P 19961212 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Alan G. Towner, Pietragallo, Bosick & Gordon, One

Oxford Centre, 301 Grant Street, 38th Floor,

Pittsburgh, PA, 15219

NUMBER OF CLAIMS:

80

EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

19 Drawing Page(s)

LINE COUNT:

4837

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 15 USPATFULL on STN

Apparatus and method for detecting and identifying infectious agents
Solid phase methods for the identification of an analyte in a biological medium, such as a body fluid, using bioluminescence are provided. A chip designed for performing the method and detecting the bioluminescence is also provided. Methods employing biomineralization for depositing silicon on a matrix support are also provided. A synthetic synapse is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:254186 USPATFULL

TITLE:

Apparatus and method for detecting and identifying

infectious agents

INVENTOR(S):

Bryan, Bruce J., Beverly Hills, CA, United States Gaalema, Stephen, Colorado Springs, CO, United States

Murphy, Randall B., Irvington, NY, United States

PATENT ASSIGNEE(S): Prolume, Ltd., Beverly Hills, CA, United States (U.S.

corporation)

NUMBER KIND US 6458547 B1 20021001 US 1997-990103 19971212 PATENT INFORMATION: APPLICATION INFO.: 19971212 (8)

> NUMBER DATE \_\_\_\_\_\_

US 1997-37675P 19970211 (60)
US 1996-33745P 19961212 (60) PRIORITY INFORMATION:

US 1996-33745P 19961212 (60) DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED PRIMARY EXAMINER: Le, Long V.

ASSISTANT EXAMINER: Padmanabhan, Kartic

LEGAL REPRESENTATIVE: Towner, Alan G., Pietragallo, Bosick & Gordon

NUMBER OF CLAIMS: 66 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 20 Drawing Figure(s); 19 Drawing Page(s)

LINE COUNT: 4442

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 7 OF 15 USPATFULL on STN

TILuciferases, fluorescent proteins, nucleic acids encoding the luciferases and fluorescent proteins and the use thereof in diagnostics, high throughput screening and novelty items

AB Isolated and purified nucleic acid molecules that encode a luciferase from Renilla mulleri, Gaussia and Pleuromamma, and the proteins encoded thereby are provided. Isolated and purified nucleic acids encoding green fluorescent proteins from the genus Renilla and Ptilosarcus, and the green fluorescent proteins encoded thereby are also provided. Compositions and combinations comprising the green fluorescent proteins

and/or the luciferase are further provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

TITLE:

2002:209340 USPATFULL Luciferases, fluorescent proteins, nucleic acids encoding the luciferases and fluorescent proteins and

the use thereof in diagnostics, high throughput

screening and novelty items

Bryan, Bruce J., Beverly Hills, CA, United States INVENTOR(S):

Szent-Gyorgyi, Christopher, Pittsburgh, PA, United

States

PATENT ASSIGNEE(S): Prolume, Ltd., Pittsburgh, PA, United States (U.S.

corporation)

NUMBER  $\mathtt{KIND}$ DATE \_\_\_\_\_\_ US 6436682 B1 20020820 PATENT INFORMATION: APPLICATION INFO.: US 2000-609161 20000630 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-277716, filed on 26 Mar 1999, now patented, Pat. No. US 6232107, issued on 15

May 2001

			NUMBER	DATE	
PRIORITY	INFORMATION:	US	1998-102939P	19981001	(60)
		បន	1998-89367P	19980615	(60)
		US	1998-79624P	19980327	(60)
DOCUMENT	TVDD.	TT# -	1744		

DOCUMENT TYPE: Utility GRANTED FILE SEGMENT:

PRIMARY EXAMINER: Prouty, Rebecca E. ASSISTANT EXAMINER: Rao, Manjunath N.

LEGAL REPRESENTATIVE: Towner, Alan G., Pietragallo, Bosick & Gordon

NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 8004

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 8 OF 15 USPATFULL on STN

Detection and visualization of neoplastic tissues and other tissues

Kits containing the diagnostic systems and diagnostic systems that rely
on bioluminescence for visualizing tissues in situ are provided. The
systems include compositions containing conjugates that include a tissue
specific, particularly a tumor-specific, targeting agent linked to a
targeted agent, a luciferase or luciferin. The systems also include a
second composition that contains the remaining components of a
bioluminescence generating reaction. Administration of the compositions
results production of light by targeted tissues that permits the
detection and localization of neoplastic tissue for surgical removal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:171910 USPATFULL

TITLE: Detection and visualization of neoplastic tissues and

other tissues

INVENTOR(S): Bryan, Bruce, Beverly Hills, CA, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2002090659 A1 20020711
US 6596257 B2 20030722

APPLICATION INFO.: US 2000-746485 A1 20001222 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-908909, filed on 8 Aug

1997, UNKNOWN

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: STEPHANIE L. SEIDMAN, ESQ., HELLER EHRMAN WHITE &

MCAULIFFE LLP, 6TH FLOOR, 4350 LA JOLLA VILLAGE DRIVE,

SAN DIEGO, CA, 92122-1246

NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
LINE COUNT: 5275

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 9 OF 15 USPATFULL on STN

Detection and visualization of neoplastic tissues and other tissues TIDiagnostic systems that rely on bioluminescence for visualizing tissues AB in situ are provided. The systems are particularly useful for visualizing and detecting neoplastic tissue and specialty tissue during surgical procedures. Kits that provide the components of the systems and methods using the systems for visualizing the tissue are also provided. The systems include compositions containing conjugates that include a tissue specific, particularly a tumor-specific, targeting agent linked to a targeted agent, a luciferase or luciferin. The systems also include a second composition that contains the remaining components of a bioluminescence generating reaction. Administration of the compositions results production of light by targeted tissues that permits the detection and localization of neoplastic tissue for surgical removal. Therapeutic methods in which photosensitizing compounds are administered are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:168053 USPATFULL

TITLE: Detection and visualization of neoplastic tissues and

other tissues

INVENTOR(S): Bryan, Bruce, Beverly Hills, CA, United States

Prolume, Ltd., Pittsburgh, PA, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE US 6416960 B1 20020709 PATENT INFORMATION: US 1997-908909 APPLICATION INFO.: 19970808 (8)

NUMBER DATE

US 1996-23374P 19960808 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Huff, Sheela

LEGAL REPRESENTATIVE: Seidman, Stephanie L., Heller Ehrman White & McAuliffe

LLP

NUMBER OF CLAIMS: 89 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 6264

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 10 OF 15 USPATFULL on STN Bioluminescent novelty items TI

Novelty items that are combinations of articles of manufacture with AB fluorescent proteins are provided. These novelty items, include combinations of transgenic plants that express a luciferase or a luciferin with plant food that contains a luciferase and a luciferin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:8941 USPATFULL

Bioluminescent novelty items TITLE:

INVENTOR(S): Bryan, Bruce, Beverly Hills, CA, UNITED STATES

DATE NUMBER KIND \_\_\_\_\_\_\_ US 2002004942 A1 20020110 US 2001-803211 A1 20010308 (9) PATENT INFORMATION: APPLICATION INFO.:

Continuation of Ser. No. US 1999-444762, filed on 22 RELATED APPLN. INFO.: Nov 1999, PENDING Continuation of Ser. No. US

1998-135988, filed on 17 Aug 1998, GRANTED, Pat. No. US 6152358 Continuation of Ser. No. US 1996-757046, filed

on 25 Nov 1996, GRANTED, Pat. No. US 5876995 Continuation of Ser. No. US 1996-597274, filed on 6 Feb

1996, GRANTED, Pat. No. US 6247995

NUMBER DATEPRIORITY INFORMATION: US 1998-79624P 19980327 (60) US 1998-89367P 19980615 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

STEPHANIE L. SEIDMAN. ESQ., Heller Ehrman White & LEGAL REPRESENTATIVE:

McAuliffe LLP, Suite 600, 4350 La Jolla Village Drive, San Diego, CA, 92122-1246

NUMBER OF CLAIMS: 10 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 9 Drawing Page(s)

LINE COUNT: 6000

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 11 OF 15 USPATFULL on STN L3

Bioluminescent novelty items TI

AB Systems and apparatus for generating bioluminescence, and combinations

of these systems and apparatus with inanimate articles of manufacture to produce novelty items are provided. These novelty items, which are articles of manufacture, are designed for entertainment, recreation and amusement, include, toys, paints, slimy play material, textiles, particularly clothing, bubbles in bubble making toys and other toys that produce bubbles, balloons, personal items, such as bath powders, body lotions, gels, powders and creams, toothpastes and other dentifrices, soaps, body paints, and bubble bath, foods, such as gelatins, icings and frostings, beverages such as beer, wine, champagne, soft drinks, and ice cubes, fountains, including liquid "fireworks" and other such jets or sprays or aerosols of compositions that are solutions, mixtures, suspensions, powders, pastes, particles or other suitable formulation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2001:92764 USPATFULL

TITLE:

Bioluminescent novelty items

INVENTOR(S):

Bryan, Bruce, 716 Arden Dr., Beverly Hills, CA, United

States 90210

		NUMBER	KIND	DATE
ATENT	INFORMATION:	US 6247995	В1	2001061

APPLICATION INFO.:

US 1996-597274

19960206 (8)

DOCUMENT TYPE: FILE SEGMENT:

Utility GRANTED

PRIMARY EXAMINER:

Wax, Robert A.

LEGAL REPRESENTATIVE:

Seidman, Stephanie L. Heller Ehrman White & McAuliffe

NUMBER OF CLAIMS:

70 1,23

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

19 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT:

4606

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 12 OF 15 USPATFULL on STN L3

Luciferases, fluorescent proteins, nucleic acids encoding the TT

luciferases and fluorescent proteins and the use thereof in diagnostics,

high throughput screening and novelty items

Isolated and purified nucleic acid molecules that encode a luciferase AB from Renilla mulleri, Gaussia and Pleuromamma, and the proteins encoded thereby are provided. Isolated and purified nucleic acids encoding green fluorescent proteins from the genus Renilla and Ptilosarcus, and the green fluorescent proteins encoded thereby are also provided. Compositions and combinations comprising the green fluorescent proteins

and/or the luciferase are further provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2001:71342 USPATFULL

TITLE:

Luciferases, fluorescent proteins, nucleic acids

encoding the luciferases and fluorescent proteins and

the use thereof in diagnostics, high throughput

screening and novelty items

INVENTOR (S):

Bryan, Bruce J., 716 N. Arden Dr., Beverly Hills, CA,

United States 90210 Szent-Gyorgyi, Christopher, Pittsburgh, PA, United

PATENT ASSIGNEE(S):

Bryan, Bruce J., United States (U.S. individual) Prolume, LTD, Pittsburgh, PA, United States (U.S.

corporation)

	NUMBER		KIND	DATE	
PATENT INFORMATION:	US	6232107	B1	20010515	
APPLICATION INFO.:	IJS	1999-277716		19990326	(9)

NUMBER DATE \_\_\_\_\_\_

PRIORITY INFORMATION:

US 1998-102939P 19981001 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Achutamurthy, Ponnathapu

ASSISTANT EXAMINER:

Rao, Manjunath N.

LEGAL REPRESENTATIVE:

Seidman, StephanieHeller, Ehrman, White & Mculiffe LLP

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

63

NUMBER OF DRAWINGS:

14 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT:

6743

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 13 OF 15 USPATFULL on STN

TIBioluminescent novelty items

AB Novelty items that are combinations of articles of manufacture with bioluminescence generating systems and/or fluorescent proteins are provided. These novelty items, which are articles of manufacture, are designed for entertainment, recreation and amusement, and include toys, paints, slimy play material, textiles, particularly clothing, bubbles in bubble making toys and other toys that produce bubbles, balloons, personal items, such as cosmetics, bath powders, body lotions, gels, powders and creams, toothpastes and other dentifrices, soaps, body paints, and bubble bath, foods, such as gelatins, icings and frostings, beverages such as beer, wine, champagne, soft drinks, and glowing ice, fountains, including liquid "fireworks" and other such jets or sprays or aerosols of compositions that are solutions, mixtures, suspensions, powders, pastes, particles or other suitable formulation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2000:159761 USPATFULL

TITLE:

Bioluminescent novelty items

INVENTOR(S):

Bryan, Bruce, 716 N. Arden Dr., Beverly Hills, CA,

United States 90210

PATENT ASSIGNEE(S):

Bryan, Bruce, Beverly Hills, CA, United States (U.S.

individual)

NUMBER KIND DATE US 6152358 20001128

PATENT INFORMATION: APPLICATION INFO.:

US 1998-135988

19980817 (9)

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 1996-757046, filed

on 25 Nov 1996, now patented, Pat. No. US 5876995 And a continuation-in-part of Ser. No. US 1996-597274, filed

on 6 Feb 1996

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER:

Wax, Robert A.

LEGAL REPRESENTATIVE:

Seidman, Stephanie L. Heller Ehrman White & McAuliffe

LLP

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

58

NUMBER OF DRAWINGS:

34 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT:

6916

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 14 OF 15 USPATFULL on STN L3

Bioluminescent novelty items TT

ABNovelty items that are combinations of articles of manufacture with bioluminescence generating systems and/or fluorescent proteins are provided. These novelty items, which are articles of manufacture, are designed for entertainment, recreation and amusement, and include toys, personal items, such as cosmetics, bath powders, body lotions, gels,

powders and creams, toothpastes and other dentifrices, soaps, body paints, and bubble bath, fountains, including liquid "fireworks" and other such jets or sprays or aerosols of compositions that are solutions, mixtures, suspensions, powders, pastes, particles or other formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

2000:117267 USPATFULL ACCESSION NUMBER:

TITLE: Bioluminescent novelty items

Bryan, Bruce, 716 N. Arden Dr., Beverly Hills, CA, United States 90210 INVENTOR (S):

Bryan, Bruce, Beverly Hills, CA, United States (U.S. PATENT ASSIGNEE(S):

individual)

NUMBER KIND DATE \_\_\_\_\_\_ 20000905

US 1999-447208 PATENT INFORMATION: APPLICATION INFO.: 19991122 (9)

Division of Ser. No. US 1998-135988, filed on 17 Aug RELATED APPLN. INFO.:

1998 which is a continuation-in-part of Ser. No. US 1996-757046, filed on 25 Nov 1996, now patented, Pat. No. US 5876995 which is a continuation-in-part of Ser.

No. US 1996-597274, filed on 6 Feb 1996

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: Wax, Robert A.

LEGAL REPRESENTATIVE: Seidman, Stephanie L. Heller Ehrman White & McAuliffe

LLP

NUMBER OF CLAIMS: 30 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 34 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 6056

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

 $\mathbf{L}3$ ANSWER 15 OF 15 USPATFULL on STN

TТ Bioluminescent novelty items

Systems and apparatus for generating bioluminescence, and combinations ABof these systems and apparatus with inanimate articles of manufacture to produce novelty items are provided. These novelty items, which are articles of manufacture, are designed for entertainment, recreation and amusement, and include toys, paints, slimy play material, textiles, particularly clothing, bubbles in bubble making toys and other toys that produce bubbles, balloons, personal items, such as bath powders, body lotions, gels, powders and creams, toothpastes and other dentifrices, soaps, body paints, and bubble bath, foods, such as gelatins, icings and frostings, beverages such as beer, wine, champagne, soft drinks, and glowing ice, fountains, including liquid "fireworks" and other such jets or sprays or aerosols of compositions that are solutions, mixtures, suspensions, powders, pastes, particles or other suitable formulation. Cartridges for charging and/or recharging the novelty items with bioluminescence generating systems are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1999:27457 USPATFULL ACCESSION NUMBER:

Bioluminescent novelty items TITLE:

Bryan, Bruce, 716 Arden Dr., Beverly Hills, CA, United INVENTOR(S):

States 90210

NUMBER KIND DATE PATENT INFORMATION: US 5876995 US 1996-757046 19990302 APPLICATION INFO.: 19961125 (8)

Continuation-in-part of Ser. No. US 1996-597274, filed RELATED APPLN. INFO.:-

on 6 Feb 1996

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Prouty, Rebecca E.

LEGAL REPRESENTATIVE:

Seidman, Stephanie L. Heller Ehrman White & McAuliffe

NUMBER OF CLAIMS:

47 25

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

34 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT:

6567

CAS INDEXING IS AVAILABLE FOR THIS PATENT.